INTRODUCTION

Science is an intellectual activity which arises from personal experiences. It takes places in the mind of man .Science is simply a way of using human intelligence for getting a better understanding of natures law. Science is then, closely related to the environment. A child should be initiated in to the fascinating World of science through the media called environment. Environmental consideration has acquired global importance because a wide range of causal factors may be held responsible for the continuous and speedy deterioration of eco balance in the world. The growing world population, rapid urbanization, volume of manufacturer activities, rapid depletion of forests etc. may be enumerated as major factors causing environmental degradation.

With the organization of International conference on Human environment in Stockholm in Sweden by United Nations in 1972, the movements of environmental education become truly international, the conference established the need of environmental education in view of generalized environmental problems and showed that there is a wide interest to solve these problems. Recognizing the potentials of education in creating an environmental conscious society; the National Policy of Education 1986, Government of India, state that "there is a paramount to create a consciousness of environment. It must permeate all ages and sections of the society, beginning with the child .Environment consciousness should inform teaching in schools and colleges. The aspect will be integrated in the entire educational process".

Surveys conducted by UNESCO-UNEP (1982) Ravindranath(1992)in ascertaining environmental education requirements in the country have cleared indicated that the most pressing requirement are in the areas of :

1. Developing and distributing quality teaching-learning materials.

2. Equipping teachers and skills in imparting environmental education.
3. Conducting action research and experimentation for promoting environmental education.
4. Networking with various institutions for information resources and expertise.

Analyzing the different approaches followed by the agencies, Ravindranath et.al. (1994) list there broad approaches. They are

1. Developing educational materials around local specific environmental problems or issues and linking them with appropriate concepts in the text book.
2. Developing educational materials on most essential environmental themes or topics and integrating them in to the school curriculum.
3. Developing educational materials around bio-geographic elements of local (specific to the eco system) and introducing them in to the school curriculum.

Environmental education enabled the child to become awareness of the environmental hazards such as pollution, deforestation, environmental health problem etc. For purposes of progress of a country both physical and educational development of the human resources through application of Science and Technology is needed a must. This word, by itself, goes a long way to enhance the quality of life. In this connection, it is worth mentioning that we do have a conservation ethic in grained in our history, culture, religion and philosophy .but practically, we have forgotten it. The poorest of the poor and richest of the rich have a sense of personal hygiene, and more often them not, their dwellings are quite clean and kitchen utensils shimmering but when it comes to disposal of daily waste, the tendency is to put it at their neiboghours doorsteps. Thus the consciousness for corporate cleanliness and social environment needs considerable improvement.

An ethic represents a system of morals, or standard held by a person, culture, or religions. Informally we might think on ethic as based on a collection of related attitudes

underlying by some abstract principle that gives the ethic both generality and a moral tone that is not necessarily part of a mere collection of attitude.

Our education system, both qualitatively and quantitatively, has been patterned after the western model. Environmental education enabled the child to become awareness of the environmental hazards such as pollution, deforestation, environmental health problems .etc. To realize the relationship between various concepts, children must visualize as they read. But it is difficult to visualize what has been read when it is not within the experiences of the children. For this reason it is the teacher's responsibility to provide visual aids of all kinds including motion picture of new wording classroom experiences extends to the home. This will ultimately lead to the mastery of learning.

Today electronic media based instructional materials has been recognized by the teacher and educationist as indispensable, and integral component of instructional materials despite both formal and informal education. Besides, several, researches have explored the contribution of filmstrips to learning. Various types of video classes television transmissions are also available their findings provide scientific support for the impression long held by many teachers on the basis of their day-to-day observation. Electronic media based instructional materials are used by teachers for variety of educational purposes.

- To provide a basis for understanding purpose,
- To provide information
- To stimulate aesthetic appreciation and ethic values.

Teaching science is not only the presentation of facts but the development of new ways of thinking, development of scientific attitude etc. Educational Technology plays a key role in this aspect in the class room situation. Learning through electronic media helps a child to retain what is learned for a long time and permits easier transfer of learning.

NEED AND SIGNIFICANCE OF THE STUDY

The primary objective of Science teaching is to give knowledge and information about the world we live in .To live as an efficient member in the modern society, each citizen need to know some facts of the natural phenomena, laws and properties of matter and the application of the knowledge and scientific principles that we come across in our daily life. In other words science must be related to and based upon these familiar experiences in the environment.

What is being today is the arrogance of humanism with its dominant power to control and conquer nature. In the controversial essay on 'Land Ethics' by Aldo Leopold (1949), it is envisaged that environmental ethics should form from the fundamental principle of all morality. He says that "a thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise". According to him, it is morally right when you conserve and morally wrong when you do otherwise. This means that, ecological considerations should be applied in all over activities and decision making process related to developmental projects. However, the principle should not be extended to stop all types of developmental projects and strangle human ingenuity. The need of the time is awareness on all these diverse aspects particularly among the young because they are quick in understanding, and priority to justice and peace.

Now-a-days our nature has undergoes an imbalance due to various human activities. This lead to various types of problems like pollution, scarcity of water, unhealthy environment etc. Aftereffect of these will lead to the death and extinction of various plants and animals. Poor environmental ethic sense lead to misbehaviour against to the environment. Our use of resources, destruction of locally made micro environment, habitats etc. cannot consider about the Vasudaivakudumbakam.(Upanishad). In order to overcome this, education and awareness programme should take the immediate remedial measure to spread the environmental awareness

all over the world. In this context, the investigator thinks that Electronic media can play an important role to make the pupils realize about the real situation. In short, to realize the need for maximizing the environmental awareness, the investigator selected the electronic media based instructional strategy. Electronic media can bring the whole phenomena occurring in the nature to the class room atmosphere.

STATEMENT OF THE PROBLEM

The present study is to create Environmental awareness among secondary school pupils. The electronic media can play an important role in realizing the environmental problems and related situation to the class room atmosphere. This provides more concreteness within a short time. The investigator intends to find out the effectiveness of Electronic media based instruction in creating environmental awareness. So the topic is entitled as **EFFECTIVENESS OF ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY TO CREATE ENVIRONMENTAL AWARENESS AMONG THE SECONDARY SCHOOL PUPILS OF KERALA.**

DEFINITION OF KEY TERMS

Effectiveness

The term 'effectiveness' stands for the outcome of the study, when influence of a factor or condition is independent on the presence or absence of another factor or condition (Good, 1973).

"Educational effectiveness is concerned with whether or not a specific set of resources has a positive effect on achievement and if so how huge this effect is" (The International Encyclopedia of Education, 1994).

In this study effectiveness refers to the influence of Electronic Media Based Instructional Strategy in creating Environmental Awareness among students.

Media

The media is defined as "the graphic, photographic, electronic or mechanical means for arresting, processing and reconstituting visual and verbal information (Brown, 1985).

Electronic Media

The physical tool of educational technology operated with the help of electric power, including tape recorder, television, motion pictures etc (Kumar, 1988).

In the present study 'electronic media' refers to Video CD programme or Video Lessons.

Instructional Strategy

The art of cleverly managing the act of providing activities , materials and guidance that facilitate teaching/learning in either formal or informal situations to promote the attainment of particular type of objectives (Heinich, 1989).

Environment

All factors (living and nonliving) that actually affect an individual organism or population at any point in the life cycle (Philip, 1996).

The Environment is anything outside an organism in which the organism lives. It can be geographical region, a certain climatic condition, the pollutants or the noise, which surround the organism (Odum, 1971).

Awareness

Awareness is used in the sense that one should be conscious about the state of perceiving and taking account of some event, occasion, experience or object (Menaria, 1989).

Environmental Awareness

Environmental Awareness means- To be conscious about Environment by a variety of experiences and acquire a basic understanding of Environment and its associated problem.

HYPOTHESES OF THE STUDY

1. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Total Environmental Awareness of Secondary School Students.
2. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Theory Awareness of Secondary School Students.
3. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Application Awareness of Secondary School Students.
4. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Ethics of Secondary School Students.
5. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Total Environmental Awareness of Boys at Secondary School level.

6. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Theory Awareness of Boys at Secondary School level.
7. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Application Awareness of Boys at Secondary School level.
8. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Ethics of Boys at Secondary School level.
9. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Total Environmental Awareness of Girls at Secondary School level.
10. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Theory Awareness of Girls at Secondary School level.
11. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Application Awareness of Girls at Secondary School level.
12. Electronic Media Based Instructional Strategy (EMBIS) is more effective than the Present Activity Oriented Approach (PAOA) on the Environmental Ethics of Girls at Secondary School level.

OBJECTIVES OF THE STUDY

1. To compare the effectiveness of Electronic Media Based Instructional Strategy with that of the Present Activity Oriented Approach with regard to Total Environmental Awareness of Students at Secondary level.
2. To compare the effectiveness of Electronic Media Based Instructional Strategy with that of the Present Activity Oriented Approach with regard to Environmental Theory Awareness of Students at Secondary level.
3. To compare the effectiveness of Electronic Media Based Instructional Strategy with that of the Present Activity Oriented Approach with regard to Environmental Application Awareness of students at Secondary level.
4. To compare the effectiveness of Electronic Media Based Instructional Strategy with that of the Present Activity Oriented Approach with regard to Environmental Ethics of students at Secondary level.
5. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Total Environmental Awareness of Boys at Secondary level.
6. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Environmental Theory Awareness among Boys at Secondary level.
7. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Environmental Application Awareness of Boys at Secondary level.
8. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Environmental Ethics of Boys at Secondary level.

9. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Total Environmental Awareness of Girls at Secondary level.
10. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Environmental Theory awareness of Girls at Secondary level.
11. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Environmental Application Awareness of Girls at Secondary level.
12. To compare the effectiveness of Electronic Media Based Instructional Strategy with the Present Activity Oriented Approach with regard to Environmental Ethics of Girls at Secondary level

METHODOLOGY IN BRIEF

The present study is conducted in VIIIth standard students. Experimental method is used in this study. Pretest – Post test non equivalent group design is used. The dependent variables are the Environmental Awareness and Environmental Ethics of the students, while independent variable is the teaching method. The experimental group is taught using Electronic Media Based Instructional Strategy and the control group in the Present Activity Oriented Approach. The sample for the study includes 180 students of standard VIII from three Schools in Thrissur district. One division in each school was selected randomly as the Experiment group and the other as the Control group.

TOOLS, TECHNIQUES AND MATERIALS USED

I. Electronic Media Based Instructional material (video lessons and accessories).
II. Present Activity Oriented based Lesson Plans

III. Environmental Theory Awareness Test
IV. Environmental Application Awareness Test
V. Environmental Ethics Scale
VI. Intelligence Test

STATISTICAL TECHNIQUES

I. Arithmetic Mean
II. Standard Deviation
III. Critical Ratio
IV. Analysis of Covariance (ANCOVA)

MAJOR CONCLUSIONS AND FINDINGS OF THE STUDY

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE TOTAL ENVIRONMENTAL AWARENESS OF SECONDARY SCHOOL STUDENTS.

The conclusion is substantiated by the following findings of the study.

1. The Mean post - test scores of experimental group that was taught through the Electronic Media Based Instruction (Total Environmental awareness) is found to be higher than that of the control group which was taught through the Present activity oriented approach.(**M1 = 69.4 ; M2 = 64.55**) .The critical ratio of the mean values of post – test scores of the experimental group and control group **(C.R. = 10.039 P < 0.01)** indicates that there is a significant difference between the Total Environmental Awareness of experimental and control groups. The mean post test score of experimental group that was taught through Electronic Media Based Instructional Strategy is found to be higher than that of the control group.

2. The Gain scores of the experimental and control groups which were subjected to the analysis of critical ratio **(C.R. = 7.26 P < 0.01)** showed that there is significant difference

between the mean gain scores of experimental group and control group. The mean gain score of the experimental group is **29.81** and Control group is **25.96**.

3. The value of analysis of covariance **($F_{y.x}$ = 95.94 P< 0.01)** is significant at 0.01 level. From $F_{y.x,}$ it is clear that final average score on achievements, after adjusted for the initial difference in experimental group is significantly difference from that in the control group. It indicates that there is significant difference between the pre-test and post-test scores of two groups. This implies that the experimental group excels control group on creating Total environmental awareness.

4. The 't' value for the adjusted mean of post test scores of experimental and control group **(t = 9.89 P < 0.01)**is significant at 0.01 level This indicates that the adjusted mean of the post test scores of the group taught through EMBIS differs significantly from the adjusted mean of post test scores of group taught through PAOA. The adjusted mean post test scores of experimental group is **69.27,** which is significantly higher than that of the control group, whose adjusted mean of the post score is **64.69**. Thus the students of the group taught through EMBIS gained significantly higher than those taught through PAOA. This confirms the supremacy of EMBIS over PAOA on creating Total Environmental Awareness.

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL THEORY AWARENESS OF SECONDARY SCHOOL STUDENTS.

The conclusion is substantiated by the following findings of the study.

1. The Mean post - test scores of experimental group that was taught through the Electronic Media Based Instruction (Environmental Theory awareness) is found to be higher than that of the control group which was taught through the Present activity oriented approach.(**M1 = 36.03; M2 = 33.83**) .The critical ratio of the mean values of post – test scores of Environmental theory Awareness of the experimental group and control group

(C.R. = 7.70 P < 0.01) indicates that there is a significant difference between the Environmental Theory Awareness of experimental and control groups. The mean post test score of experimental group that was taught through Electronic Media Based Instructional Strategy is found to be higher than that of the control group.

2. The Gain scores of the experimental and control groups which were subjected to analysis of critical ratio **(C.R. 5.08 P < 0.01)** showed that there is significant difference between the mean gain scores of experimental group and control group. The mean gain score of experimental group is **17.58** and control group is **15.78**.

3. The value of analysis of covariance **($F_{y.x}$= 55.19 P < 0.01)** is significant at 0.01 level. From $F_{y.x,}$ it is clear that final average score on achievements, after adjusted for the initial difference in experimental group is significantly difference from that in the control group. It indicates that there is significant difference between the pre-test and post-test scores of two groups. This implies that the experimental group excels control group on creating environmental theory awareness.

4. The 't' value for the adjusted mean of post test scores of experimental and control group **(t = 7.46 P < 0.01)**is significant at 0.01 level. It indicates that the adjusted mean of the post test scores of the group taught through EMBIS differs significantly from the adjusted mean of post test scores of group taught through PAOA. The adjusted mean post test scores of experimental group is **36.01,** which is significantly higher than that of the control group, whose adjusted mean of the post score is **33.86.** Thus the students of the group taught through EMBIS gained significantly higher than those taught through PAOA. This confirms the supremacy of EMBIS over PAOA on creating Environmental Theory Awareness.

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL APPLICATION AWARENESS OF SECONDARY SCHOOL STUDENTS.

The conclusion is substantiated by the following findings of the study.

1. The mean post - test scores of experimental group that was taught through the Electronic Media Based Instruction(Environmental Application awareness) is found to be higher than that of the control group which was taught through the Present activity oriented approach.(**M1 = 33.37; M2 = 30.83**) .The critical ratio of the mean values of post –test scores of Environmental Application Awareness of the experimental group and control group **(C.R. = 6.74 P< 0.01)** indicates that there is a significant difference between the Environmental Application Awareness of experimental and control groups. The mean post test score of experimental group that was taught through Electronic Media Based Instructional Strategy is found to be higher than that of the control group.

2. The gain scores of the experimental and control groups which were subjected to the analysis of critical ratio **(C.R. 4.93 P < 0.01)** showed that there is significant difference between the mean gain scores of experimental group and control group. The mean gain score of experimental group is **12.8** and control group is **10.2**.

3. The value of analysis of covariance **($F_{y.x}$= 45. 99 P < 0.01)** is significant at 0.01 level. From $Fy_{.x}$, it is clear that final average score on achievements, after adjusted for the initial difference in experimental group is significantly difference from that in the control group. It indicates that there is significant difference between the pre-test and post-test scores of two groups. This implies that the experimental group excels control group on creating Environmental Application awareness.

4. The 't' value for the adjusted mean of post test scores of experimental and control groups **(t = 6.82 P <0.01)**is significant at 0.01 level. This indicates that the adjusted mean of the post test scores of the group taught through EMBIS differs significantly from the adjusted mean of post test scores of group taught through PAOA. The adjusted mean post test scores of experimental group is **33.27,** which is significantly higher than that of the control group, whose adjusted mean of the post score is **30.82**. Thus the students of the group taught through EMBIS gained significantly higher than those taught through PAOA. This confirms the supremacy of EMBIS over PAOA on creating Environmental Application Awareness.

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL ETHICS OF SECONDARY SCHOOL STUDENTS.

The conclusion is substantiated by the following findings of the study.

1. The Mean post - test scores of experimental group that was taught through the Electronic Media Based Instruction (Environmental Ethics) is found to be higher than that of the control group which was taught through the Present activity oriented approach.(**M1 = 107.9 ; M2 = 89.81**) .The critical ratio of the mean values of post –test scores of the experimental group and control group **(C.R = 10.14 P < 0.01)** indicates that there is a significant difference between the Environmental ethical Awareness of experimental and control groups. The mean post test score of experimental group that was taught Through Electronic Media Based Instructional Strategy is found to be higher than that of the control group.

2. The Gain scores of the experimental and control groups which were subjected to the analysis of critical ratio **(C.R. = 9. 29 P < 0.01)** showed that there is significant difference between the mean gain scores of experimental group and control group. The mean gain score of experimental group is **66.15** and control group is **49.02**.

3. The value of analysis of covariance **($F_{y.x}$= 99.16 P < 0.01)** is significant at 0.01 level. From $Fy_{.x,}$ it is clear that final average score on achievements, after adjusted for the initial difference in experimental group is significantly difference from that in the control group. It indicates that there is significant difference between the pre-test and post-test scores of two groups. This implies that the experimental group excels control group on creating Environmental Ethics.

4. The 't' value for the adjusted mean of post test scores of experimental and control group **(t = 10.02 P <0.01)** is significant at 0.01 level. This indicates that the adjusted mean of the post test scores of the group taught through EMBIS differs significantly from the adjusted mean of post test scores of group taught through PAOA. The adjusted mean post test scores of experimental group is **107.80,** which is significantly higher than that of the control group, whose adjusted mean of the post score is **89.93**. Thus the students of the group taught through EMBIS gained significantly higher than those taught through PAOA. This confirms the supremacy of EMBIS over PAOA on creating Environmental Ethics.

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE TOTAL ENVIRONMENTAL AWARENESS OF BOYS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Awareness scores (Total Environmental Awareness) of boys in the experimental and control group were compared, the difference between the mean was found to be statistically significant. (**C.R. = 5.14 P < 0.01**). The Experimental group excel the control group boys (**M1 = 67.26 M2 = 63.97**).

2. When the Total Gain Scores of the Environmental Awareness of Boys in the Experimental and control Group were compared, the difference between their means

was found to be statistically significant. (**C.R. = 4.77 P < 0.01**). The Experimental Group mean is greater than that of the Control group mean (**M1 = 28.16 ; M2 = 25.07**).

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL THEORY AWARENESS OF BOYS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Theory Awareness scores of boys in the experimental and control group were compared, the difference between the mean was found to be Statistically significant.(**C.R. = 5.94 P < 0.01**). The Experimental group excel the control group boys (**M1 = 35.69; M2 = 33.35**).
2. When the Gain Scores of the Environmental Theory Awareness of Boys in the Experimental and control Group were compared, the difference between their means was found to be statistically significant**. (C.R. = 4.88 P < 0.01).** The Experimental Group mean is greater than that of the Control group mean (**M1 =17.23; M2 =14.83**).

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL APPLICATION AWARENESS OF BOYS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Application Awareness scores of boys in the experimental and control group were compared, the difference between the mean was found to be Statistically significant **(C.R. =3.35 P < 0.01)**. The Experimental group excel the control group boys **(M1 = 31.57; M2 = 29.59).**
2. When the Gain Scores of the Environmental Theory Awareness of Boys in the Experimental and control Group were compared, the difference between their means was found to be statistically significant **(C.R =4.33 P < 0.01).** The Experimental Group mean is greater than that of the Control group mean **(M1 = 10.90; M2 = 9.02).**

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL ETHICS OF BOYS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Ethics scores of boys in the experimental and control group were compared, the difference between the mean was found to be Statistically significant **(C.R.= 7.87 P < 0.01)**. The Experimental group excel the control group boys **(M1 = 111.64; M2 = 88.40).**
2. When the Gain Scores of the Environmental Theory Awareness of Boys in the Experimental and control Group were compared, the difference between their means was found to be statistically significant. **(C.R = 7.11 P < 0.01).** The Experimental Group mean is greater than that of the Control group mean **(M1 = 67.71; M2 = 45.78).**

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE TOTAL ENVIRONMENTAL AWARENESS OF GIRLS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Awareness scores (Total Environmental Awareness) of Girls in the experimental and control group were compared, the difference between the mean was found to be statistically significant **(C.R. = 11.47 P < 0.01)**. The Experimental group excel the control group girls **(M1 = 71.27; M2 = 65.06)**.
2. When the Total Gain Scores of the Environmental Awareness of Girls in the Experimental and control Group were compared, the difference between their means was found to be statistically significant **(C.R. = 6.09 P < 0.01)**. The Experimental Group mean is greater than that of the Control group mean **(M1= 31.25; M2 = 26.72).**

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL THEORY AWARENESS OF GIRLS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Theory Awareness scores of Girls in the experimental and control group were compared, the difference between the mean was found to be Statistically significant.(**C.R. = 5.63 P < 0.01**). The Experimental group excel the control group girls **(M1= 36.33; M2 = 34.25)**.
2. When the Gain Scores of the Environmental Theory Awareness of Girls in the Experimental and control Group were compared, the difference between their means was found to be statistically significant **(C.R. =3.41 P < 0.01)**. The Experimental Group mean is greater than that of the Control group mean **(M1 = 18.10; M2 = 16.6**).

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL APPLICATION AWARENESS OF GIRLS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Application Awareness scores of girls in the experimental and control group were compared, the difference between the mean was found to be Statistically significant **(C.R. = 10.79 P < 0.01)**. The Experimental group excel the control group girls **(M1= 34.93; M 2=31.02)**.
2. When the Gain Scores of the Environmental Theory Awareness of Girls in the Experimental and control Group were compared, the difference between their means was found to be statistically significant. **(C.R. = 5.37 P < 0.01)**. The Experimental Group mean is greater than that of the Control group mean **(M1= 13.31; M2 =10.16)**.

ELECTRONIC MEDIA BASED INSTRUCTIONAL STRATEGY (EMBIS) IS MORE EFFECTIVE THAN THE PRESENT ACTIVITY ORIENTED APPROACH (PAOA) ON THE ENVIRONMENTAL ETHICS OF GIRLS AT SECONDARY SCHOOL LEVEL.

The conclusion is substantiated by the following findings of the study.

1. When the Post test Environmental Ethics scores of girls in the experimental and control group were compared, the difference between the mean was found to be Statistically significant **(C.R. = 6.75 P < 0.01)**. The Experimental group excel the control group girls **(M1= 104.66; M2 = 91.04)**.

2. When the Gain Scores of the Environmental Theory Awareness of Girls in the Experimental and control Group were compared, the difference between their means was found to be statistically significant. **(C.R. = 6.19 P < 0.01)**. The Experimental Group mean is greater than that of the Control group mean **(M1= 64.79; M2 = 51.85)**.